

**What Is Claimed Is:**

*Sub  
a1*

1           A method for scheduling and simulating solution preparation, said  
2           solution for use in a biopharmaceutical production process, comprising the steps  
3           of:

4           (1) identifying at least one solution for preparation and its associated  
5           volume;  
6           (2) identifying a predetermined start date for preparation of said at  
7           least one solution and at least one successive start date for preparation of said at  
8           least one solution;  
9           (3) assigning said at least one solution to a preparation vessel; and  
10          (4) determining the duration of the solution preparation procedure  
11          based on said step of assigning said at least one solution to a preparation vessel.

1           2. The method of claim 1, wherein step (1) comprises the step of  
2           calculating the total volume of said at least one solution needed for one process  
3           cycle.

1           3. The method of claim 1, wherein the step (2) comprises the step of  
2           calculating the latest start date for preparation of said at least one solution  
3           necessary for the preparation of said at least one solution to be prepared in time  
4           for use in the biopharmaceutical process.

*ADD A2 >*